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DATE: April 2, 2004

TO: Examiner
Group Art Unit:

FAX #: 703-872-9306

PHONE #: 703-308-0477

Application No.: 10/772,102
Applicant: Kumar
Due Date: May 4, 2004

OUR REF.: 2950.21US02

FROM: Peter S. Dardi, Ph.D.
PHONE #: (612) 349-5746

Attached please find the following document for filing in the above-identified patent application:

- 1) Information Disclosure Statement (2 pages)
- 2) Form 1449/PTO (7 pages)

Sincerely,

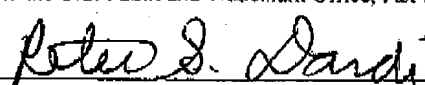


Peter S. Dardi, Ph.D.
Reg. No. 39,650

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Peter S. Dardi

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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Attorney Docket No.: 2950.21US02

Kumar

Confirmation No.: Not Assigned

Application No.: 10/772,102

Examiner: Not Assigned

Filed: February 4, 2004

Group Art Unit: Not Assigned

For: HIGH LUMINESCENCE PHOSPHOR PARTICLES AND METHODS FOR
PRODUCING THE PARTICLES

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date. No certification or fee is required.

Copies of the references were cited by or submitted to the Office in Patent Application No. 09/843,195, filed April 26, 2001, now U.S. Patent No. 6,692,660, which is

Application No. 10/772,102

relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these references are not attached. 37 C.F.R. § 1.98(d).

Respectfully submitted,



Peter S. Dardi, Ph.D.
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Peter S. Dardi

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/772,102
				Filing Date	February 4, 2004
				First Named Inventor	KUMAR
				Art Unit	Not Assigned
				Examiner Name	Not Assigned
				Attorney Docket Number	2950.21US02
Sheet	1	of	7		
U.S. PATENT DOCUMENTS					
EXAMINER INITIAL*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
		Number-Kind Code ² (if known)			
		2,603,554	07/1952	Calbeck	
		2,610,154	09/1952	Brown, Jr.	
		2,854,413	09/1958	Geary	
		2,863,084	12/1958	Arnott et al.	
		2,898,191	08/1959	Conn et al.	
		2,968,627	02/1958	Wachtel	
		3,040,202	06/1962	Lehmann	
		3,131,025	04/1964	Carnall, Jr. et al.	
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		4,340,839	07/1982	Fujita et al.	
		4,680,231	07/1987	Yamuaura et al.	
FOREIGN PATENT DOCUMENTS					
EXAMINER INITIAL*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			
		WO 98/37165	08/1998	PCT	
		WO 99/23191	05/1999	PCT	
		WO 99/46204	09/1999	PCT	
		WO 99/50880	10/1999	PCT	
		WO 00/46867	08/2000	PCT	
		WO 00/54291	09/2000	PCT	
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<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> <p>¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.</p> <p>This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.</p>					

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		Number-Kind Code ² (if known)				
		H429	02/1988	Harris et al.		
		4,738,798	04/1988	Mahler		
		4,808,398	02/1989	Heistand, II		
		4,842,832	06/1989	Inoue et al.		
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		5,418,062	05/1995	Budd		
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		5,447,708	09/1995	Helble et al.		
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		5,460,701	10/1995	Parker et al.		
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		Country Code ⁴ Number ⁴ Kind Code ⁵ (if known)				
EXAMINER SIGNATURE		DATE CONSIDERED				

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				Art Unit	Not Assigned
				Examiner Name	Not Assigned
Sheet	3	of	7	Attorney Docket Number	2950.21US02
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		Number-Kind Code ² (if known)			
		5,498,369	03/1996	Bredol et al.	
		5,504,599	04/1996	Okibayashi et al.	
		5,527,519	06/1996	Miksits et al.	
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		5,699,035	12/1997	Ito et al.	
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		6,048,616	04/2000	Gallagher et al.	
FOREIGN PATENT DOCUMENTS					
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				Art Unit	Not Assigned
				Examiner Name	Not Assigned
Sheet	5	of	7	Attorney Docket Number	2950.21US02
NON PATENT LITERATURE DOCUMENTS					
EXAMINER INITIAL [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
		Goldstein et al., Observation of Melting in 30A Diameter CdS NanoCrystals, Met. Res. Soc. Symp. Proc. Vol. 206, pp. 271-274, 1991			
		Curtin, The Field Emission Display: A New Flat Pane Technology, Conf. Rec. of the 1991 Int'l Display Res. Conf., pp. 12-15, October 1991			
		Tissue et al., Synthesis and Characterization of Metal-Oxide Nanocrystals Prepared by CO ₂ - Laser-Heated Vaporization/Condensation, Journal of the SID, Vol. 4(3), pp. 213-217, October 1996			
		Siegel, Creating Nanophase Materials, Scientific American; 2 pages, December 1996			
		J.S. Yoo et al., The Effects of Particle Size and Surface Recombination Rate on the Brightness of Low-Voltage Phosphor, J. App. Phys. 81(6), 2810-2813, March 15, 1997			
		El-Shall et al., Synthesis of Nanoparticles by a Laser Vaporization-Controlled Condensation Technique, SPIE, Vol. 3123, pp. 98-108, July 1997			
		Oshio et al., Firing Technique for Preparing a BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Phosphor with Controlled Particle Shape and Size, Journal of the Electrochemical Society, 146(1), pp. 392-399, 1999			
		Konrad et al., Chemical Vapor Synthesis and Luminescence Properties of Nanocrystalline Cubic Y ₂ O ₃ :Eu, J. Appl. Phys., Vol. 86, No. 6, pp. 3129-3133, Sept. 15, 1999			
		J.S. Yoo et al., Spherical BaMgAl ₁₀ O ₁₇ :Eu ²⁺ Phosphor Prepared by Aerosol Pyrolysis Technique for PDP Applications, Journal of the Electrochemical Society, 148(9) H128-H131, 2001			
		Ramponi et al., "New Er-doped phosphate glass for ion-exchange active waveguides: accurate determination of the refraction index," Optical Materials, 14, pp. 292-296.			
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<p>[*]EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language translation is attached.</p> <p>This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.</p> <p style="text-align: center;"><i>If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.</i></p>					

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NON PATENT LITERATURE DOCUMENTS					
EXAMINER INITIAL ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published			T ²
		Lee et al., "Controlled formation of nanoparticles utilizing laser irradiation in a flame and their characteristics," Applied Physics Letters, Vol. 79, No. 15, pp. 2459-2461, October 8, 2001.			
		Vermelho et al., "The influence of sodium ions on rare-earth solubility in silicon-silicon SiO ₂ -P ₂ O ₅ glass hosts fabricated by flame hydrolysis deposition," Proceedings of SPIE, Vol. 4277, pp. 381-387, 2001.			
		Ballato et al., "Fabrication of fibers with high rare-earth concentrations for Faraday isolator applications," Applied Optics, Vol. 34, No. 30, pp. 6848-6854, October 20, 1995.			
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		Chemical Abstract citation 135:144231: Mechanism of thermal degradation of blue BaMgAl ₁₀ Si ₂ Eu (BAM) phosphor, Zhou et al., Faguang Xuebao (2000), 21, (4), 345-48.			
		Jean et al., "Spherical BaMgAl ₁₀ Si ₂ Eu ²⁺ Phosphor Prepared by Aerosol Pyrolysis Technique for PDP Application," Jour. Electrochem. Soc., 149 (9), 2001, pp. H128-H131.			
		Chemical Abstract citation 132:327319: Blue emitting CaAl ₂ O ₄ :Eu ²⁺ phosphors for PDP application, Tanaka et al. Journ. Lumines., (2000) 87-89, 1250-1253.			
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		Chemical Abstract citation "Photoluminescence imaging of phosphor particles using near-field optical microscope with UV light excitation," Nishikawa et al. Jour. Microscopy, (1999), 194 (2/3), 415-420.			
EXAMINER SIGNATURE				DATE CONSIDERED	
<p>¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ²Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.</p> <p style="text-align: center;"><i>If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.</i></p>					